

## Cooper Road and Commerce Avenue Water Quality Assurance Revolving Fund (WQARF) site

## **Community Involvement Plan**



**Cooper Road and Commerce Avenue WQARF Site Monitoring Well Installation** 

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**Disclaimer:** All telephone numbers, email addresses, and contact names are subject to change after the date of this publication.

## Introduction

#### CIP Purpose

The Arizona Department of Environmental Quality (ADEQ) is committed to involving communities in the Water Quality Assurance Revolving Fund (WQARF) site investigation and cleanup process.

The Cooper Road and Commerce Avenue WQARF site community involvement plan (CIP) describes how ADEQ will fulfill this commitment. ADEQ will regularly update this plan based on site-specific developments, public comments and community concerns. ADEQ welcomes community input on this CIP.

#### **WQARF** Process

The goal of the WQARF process is to clean up sites with groundwater and/or soil contamination, to protect human health and the environment. Created under the Environmental Quality Act of 1986, WQARF receives funding from legislative appropriations, cost recovery from responsible parties, and special fees.

The WQARF program identifies contaminated sites in significant need of remediation. WQARF Registry sites are assigned an Eligibility and Evaluation (E&E) score based on several factors, such as the nature and extent of contamination and the number of people who may be exposed to the contaminants. The E&E score does not necessarily mean that the site poses a direct risk to human health and/or the environment.

The WQARF process uses a step-by-step approach to thoroughly investigate contaminated sites. ADEQ uses data from the investigation to develop a site-specific cleanup strategy, also called the site's remedy.

The flowchart in Appendix A depicts each phase in the WQARF process. Refer to the glossary for definitions of each WQARF phase.

#### **ADEQ Spokesperson Contact Information**

The ADEQ designated spokesperson will act as liaison between ADEQ and the community. The spokesperson will provide notice of public meetings, plan Community Advisory Board meetings, and ensure that CIP requirements are followed. Contact information for the designated spokesperson for this WQARF site is below:

#### **Community Involvement Coordinator ADEQ**

1110 West Washington Street, 6<sup>th</sup> Floor Phoenix, AZ 85007 602-292-0218 or 800-234-5677 **Email:** Boschert.Barbara@azdeg.gov

Fax: 602-771-4272

View Community Involvement Contacts Online: http://www.azdeq.gov/WQARF

#### Site Information Repository

The Cooper Road and Commerce Avenue WQARF site information repository contains site-related documents, such as technical reports, public notices, and this CIP. ADEQ will continue to add site-related documents to the site information repository as they are completed. The site information repository is available online and in person:

#### Online:

azdeq.gov/cooper-commerce-repository

#### In Person

ADEQ Records Center 1110 West Washington Street Phoenix, AZ 85007

602-771-4380 or 800-234-5677

(Please call to make an appointment)

To make alternative arrangements to review documents in person at a location nearest you, contact the ADEQ Community Involvement Coordinator.

## Site Overview

The Cooper Road and Commerce Avenue WQARF site is located in Gilbert, Arizona. The site was placed on the WQARF Registry in June 2004, with an E&E score of 33 out of a possible 120. The major factor leading to the score was the presence of volatile organic compounds (VOCs) in groundwater at levels exceeding Arizona Aquifer Water Quality Standards (AWQS).

The site investigation area is generally bound by West Houston Avenue to the north, West Cullumber Avenue to the south, North Golden Key Drive to the east, and North El Dorado Drive to the west. The following map shows the plume boundaries based on the most recent groundwater monitoring data.

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Cooper Road and Commerce Avenue

The groundwater contaminants of concern at the site are tetrachloroethene (PCE) and trichloroethene (TCE).

From 2010-2014, ADEQ operated a groundwater pump and treat system to remediate the site contamination. The groundwater pump and treat system was shut down in September 2014 to evaluate the need for continued operation. During operation from 2010 to 2014, the groundwater pump and treat system treated over 193,000,000 gallons of water, and recovered over 40 pounds of volatile organic compounds.



**Groundwater Monitoring Well Installation** 

Soil vapor extraction (SVE) was initiated in 2008 and is still operational. Additional groundwater monitoring wells were installed at the site in 2016 and 2018, and regular groundwater sampling events take place at the site. In 2016, ADEQ conducted groundwater modeling to examine the effect of natural attenuation at the site. SVE was initiated in 2008 and is still operational. The Proposed Remedial Action Plan was completed in July 2019. The Record of Decision was released in June 2020. The selected remedy for the Cooper Road and Commerce Avenue WQARF site is SVE to clean-up the impacted soil/soil vapor within the source area at the former Unichem facility, and monitored natural attenuation to verify the natural degradation of the COCs in the groundwater at the Site.

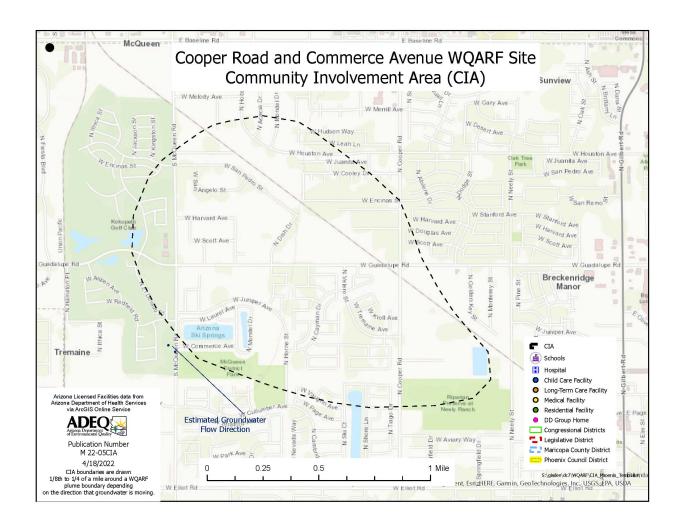
A full history of site activities is located in Appendix B.

## **Community Profile**

#### Community Involvement Area (CIA)

The Cooper Road and Commerce Avenue WQARF site Community Involvement Area (CIA) designates a geographic area in which ADEQ will send mass mailings and focus its outreach efforts. CIA boundaries are determined based on site-specific characteristics such as the affected media (i.e., soil, surface water, or groundwater), groundwater flow direction, exposure routes, and proximity to residential areas and public facilities. The CIA may change as ADEQ collects more information.

The map below illustrates the CIA for the Cooper Road and Commerce Avenue WQARF site.



#### **Community Demographics**

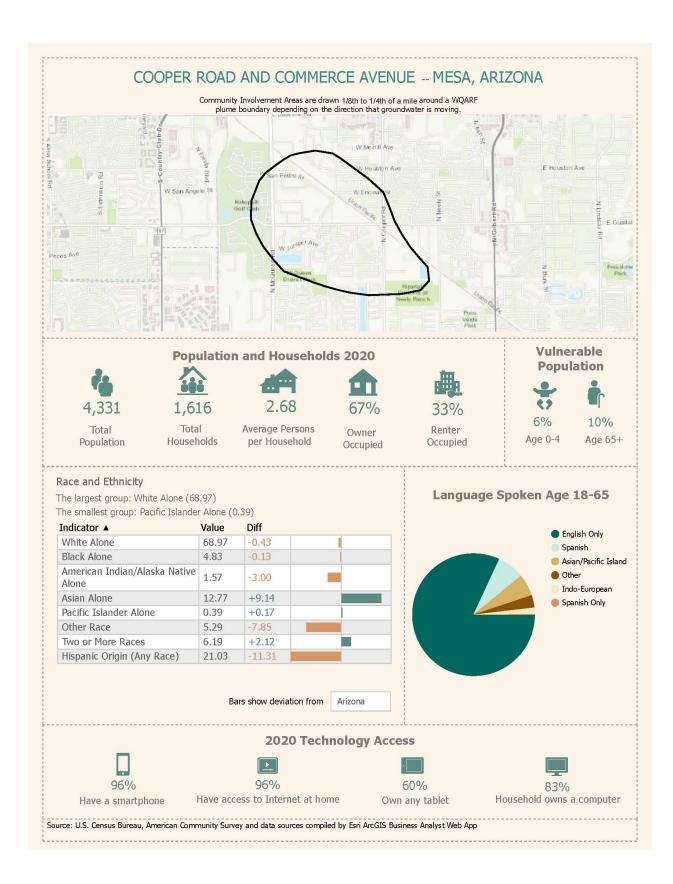
Community demographics help ADEQ plan and implement community involvement activities. The following page displays key demographic information for the Cooper Road and Commerce Avenue WQARF site CIA.

The Gilbert, AZ population in 2020 is approximately 243,254 people (as reported by census.gov). The CIA boundary for the Cooper Road and Commerce Avenue WQARF site is located in zip code 85233 and is estimated to contain approximately 1,616 households. The Cooper Road and Commerce Avenue WQARF site is located within the boundaries of Gilbert and consists of a mixture of commercial businesses and residential neighborhoods.

Residents identifying themselves as Hispanic or Latino within the Cooper Road and Commerce Avenue WQARF site CIA comprise just over 20% of the population, which is less than the 30.7% average Hispanic and Latino population for the State of Arizona.

ADEQ looks at the community as a whole, with an emphasis on the proportion of residents under age five or above age 65. These populations are considered more vulnerable to the potential health effects associated with exposure to environmental contamination.

For further demographic information regarding the CIA, please refer to the listing of neighborhood associations, community schools, and vulnerable population centers in Appendix C, and local and state elected officials in Appendix D.



## **Community Issues and Concerns**

To better understand the community and its concerns, ADEQ conducted interviews with community members who live or work near the Cooper Road and Commerce Avenue WQARF site. ADEQ will use this community feedback to ensure that future outreach addresses community concerns and to determine effective communication methods. The following section summarizes common concerns related to the site and ADEQ outreach activities.

#### **Summary of Community Issues**

#### **Community Concerns**

Interviewees had the following questions/concerns about the site:

#### Site remediation:

 A majority of the interviewees expressed concern that the remediation project might be defunded in the future.

#### **Outreach Recommendations**

Interviewees provided the following feedback and suggestions on current and future outreach pertaining to the Cooper Road and Commerce Avenue WQARF site:

#### General:

- Interviewees asked that community outreach for this site be continued until the site is delisted
- One interviewee requested biannual community updates regarding the site
- One interviewee felt that ADEQ contact with the community has been "hit or miss" and requested more frequent and continual contact.

#### Community Advisory Board (CAB) and public meetings:

• Email and the public meetings are interviewees' preferred methods of getting information about the site.

## **Community Involvement Action Plan**

The Cooper Road and Commerce Avenue WQARF site Community Involvement Action Summary table describes the required community involvement activities for each WQARF phase and notes the date of completed activities. This summary is followed by a description of ADEQ communication techniques to share site information and implement required activities.

#### **Community Involvement Action Summary - Required Activities**

The following table describes the required community involvement actions for the Cooper Road and Commerce Avenue WQARF site and notes which actions have been completed to date.

	Community Involvement Action Summary				
WQARF Phase	ADEQ Community Involvement Activity	Statute (A.R.S.) and Rule (A.A.C) References	Activity to Date	Complete	
Preliminary Investigation	Provide owners and operators a copy of the Draft WQARF Site Registry Report for a 15-day comment period prior to publishing a notice in a newspaper announcing the availability of the Draft WQARF Site Registry Report for a 30-day public comment period.	A.R.S. § 49-287.01(C) A.R.S. § 49-289.03(A)(1)	Mailing to owners and operators, February 8, 2004 Public notice, <i>Arizona Republic</i> , February 23, 2004	*	
WQARF Registry Listing	<ul> <li>Following the listing of a site on the WQARF Registry, ADEQ will:</li> <li>Establish a preliminary community involvement area (see Chapter 2, Section A) within 90 days of site listing on the WQARF Registry.</li> <li>Provide written notice to the community on hazardous substance contamination in the area, the actual and potential risks and routes of exposure, possible health effects, and the opportunity to join the site mailing list.</li> <li>Identify ADEQ personnel to contact for further information.</li> </ul>	A.R.S. § 49-289.02	Notice to community and development of a community involvement area, September 2004	*	
	Develop a Community Involvement Plan that establishes a Community Advisory Board, designates a spokesperson, provides for newsletters with current information about the status of remedial actions at the site, establishes a public document repository location, and provides for schedules of Community Advisory Board meetings and public meetings. Update the Community Involvement Plan at least every 2 years.	A.R.S. § 49-287.03(D) A.R.S. § 49-289.03(B) A.R.S. § 49-289.03(C) A.A.C. R18-16-404(C)(1)(i) A.A.C. R18-16-404(C)(1)(j) A.A.C. R18-16-404(C)(1)(k) A.A.C. R18-16-404(C)(1)(o)	Original CIP, Summer 2004 Updated CIPs, April 2008, July 2016, January 2019, January 2020 and January 2021	>	

	Community Involvement Action Summary					
WQARF Phase	ADEQ Community Involvement Activity	Statute (A.R.S.) and Rule (A.A.C) References	Activity to Date	Complete		
Early Response Action	A work plan shall be prepared for each Early Response Action that will include a description of work to be done, known site conditions, a plan for conducting the work; a description of community involvement activities for the Early Response Action under R18- 16-404; and a schedule.  Community involvement activities may include development of a community involvement plan under A.A.C. R18-16-404(C) or community involvement activities appropriate to the scope and schedule of the work performed such as a general public notice to those who may be impacted by field work as indicated in A.A.C. R18-16-404(D)(2).  If immediate action is necessary to address a current risk to public health or the environment, to protect a source of water, or to provide a supply of water, the work plan and written rationale may be prepared and the community involvement activities may be conducted after commencement of the Early Response Action.	A.A.C. R18-16-404 A.A.C. R18-16-405(D)(2) A.A.C. R-18-16-405(E) A.A.C. R18-16-405(G)	Early Response Action activities, 2005, 2007, 2010, and 2012	~		
Remedial Investigation	Provide notice to interested parties announcing the availability of the Remedial Investigation Scope of Work or Work Plan, Fact Sheet, and Community Involvement Plan outline for review and a 30-day public comment period. Provide notice indicating that any person by written agreement with ADEQ may develop and implement a work plan for the Remedial Investigation and Feasibility Study and solicit information regarding the current and future land and water uses at the site. These notices shall also provide an opportunity to request a public meeting.	A.R.S. § 49-287.03(B) A.R.S. § 49-287.03(C) A.A.C. R18-16-301(C) A.A.C. R18-16-403(F) A.A.C. R18-16-403(G) A.A.C. R18-16-404(C)(1)(a) A.A.C. R18-16-406(B) A.A.C. R18-16-406(D)	Combined notice, Summer 2004	<b>&gt;</b>		

Note: A potentially responsible party search is conducted concurrently with the Remedial Investigation and Feasibility Study, but does not have mandated community involvement activities.

	Community Involvement Action Summary				
WQARF Phase	ADEQ Community Involvement Activity	Statute (A.R.S.) and Rule (A.A.C) References	Activity to Date	Complete	
Remedial Investigation (continued)	Establish a selection committee to choose Community Advisory Board members for the site. The selection committee shall consist of the following number of people from each organization:	A.R.S. § 49-289.03(D)	Selection committee established, March 21, 2006	~	
	Establish a Community Advisory Board of between 5 to 20 members that represent a diversified cross section of the community. Within 90 days of appointment by the Community Advisory Board selection committee, the Community Advisory Board shall elect co-chairpersons and develop a charter defining operating procedures, membership terms and obligations, goals for developing issues, concerns and opportunities related to quick cleanup of the site, and any other anticipated activities for identifying and improving the public's access and understanding of information regarding the remediation process at the site.	A.R.S. § 49-289.03(C) A.R.S. § 49-289.03 (E) A.R.S. § 49-289.03(F)	CAB established, June 14, 2006	~	
	Publish a combined public notice announcing the availability of the Draft Remedial Investigation Report for review and a minimum 30-day public comment period and the date of a public meeting to solicit Remedial Objectives for the site. The public meeting shall be held not less than 45 calendar days and not more than 90 calendar days after release of the Draft Remedial Investigation report, unless ADEQ sets a different date for good cause.  The Draft Remedial Investigation Report should be provided to the Community Advisory Board, interested local government agencies, affected water providers and the Department of Water Resources.	A.A.C. R18-16-301(C) A.A.C. R18-16-404(C)(1)(b) A.A.C. R18-16-406(F) A.A.C. R18-16-406(I)(1) A.A.C. R18-16-406(I)(2)	Draft Remedial Investigation Report public notice/comment period, October 23, 2014  Remedial Objectives public meeting, December 8, 2014	~	

	Community Involvement Action Summary					
WQARF Phase	ADEQ Community Involvement Activity	Statute (A.R.S.) and Rule (A.A.C) References	Activity to Date	Complete		
Remedial Investigation (continued)	Publish a public notice announcing the availability of the Proposed Remedial Objectives Report for a 30-day public comment period.  Publish a public notice of the availability of the Final Remedial Investigation Report, which shall contain the results of site characterization and the final Remedial Objectives Report. The final Remedial Investigation report shall be accompanied by responsiveness summaries regarding comments, issues and concerns raised in the community involvement process and, if the report is prepared by a person other than ADEQ, copies of the comments received.	A.A.C. R18-16-301(C) A.A.C. R18-16-404(C)(1)(c) A.A.C. R18-16-406(I)(5) A.A.C. R18-16-406(J)	Proposed Remedial Objectives Report public notice/comment period, February 19, 2015  Final Remedial Investigation Report public notice, July 9, 2015	~		
Feasibility Study	Provide notice to interested parties announcing the availability of the Feasibility Study Work Plan.  Although not mandated, ADEQ will also provide public notice upon completion of the Feasibility Study.	A.A.C. R18-16-404(C)(1)(d) A.A.C. R18-16-407(B)	Feasibility Study Work Plan public notice, July 9, 2015	~		
Proposed Remedial Action Plan	Publish a public notice announcing the availability of the Proposed Remedial Action Plan for a 90-day public comment period. (If not combined, separate public notices will be provided for the Draft Remedial Investigation/comment period and the Remedial Objectives solicitation and public meeting.) Mail the same notice(s) to interested parties. The notice(s) will describe the proposed remedy and its estimated cost, and identify where the Proposed Remedial Action Plan, Remedial Investigation, and Feasibility Study Reports may be inspected.	A.R.S. § 49-287.04(B) A.R.S. § 49-289.03(A)(2) A.A.C. R18-16-301(C) A.A.C. R18-16-404(C)(1)(e) A.A.C. R18-16-408(A)	Proposed Remedial Action Plan public notice, July 18, 2019	~		
Record of Decision	Publish a public notice announcing the availability of the Record of Decision and Responsiveness Summary for review.	A.R.S. § 49-287.04(G) A.A.C. R18-16-404(C)(1)(f) A.A.C. R18-16-410	Record of Decision public notice, June 25, 2020	~		

	Community Involvement Action Summary					
WQARF Phase	ADEQ Community Involvement Activity	Statute (A.R.S.) and Rule (A.A.C) References	Activity to Date	Complete		
Implementation of Remedy (Remedial Actions)						
	Provide notice to the public and interested parties of a request for ADEQ to waive a regulatory requirement (permit) to complete remedial actions.	A.R.S. § 49-290 A.A.C. R18-16-404(C)(1)(I)				
	Provide notice to the public that fieldwork conducted to remove contaminants of concern may result in noise, light, odor, dust, or other adverse impacts.	A.A.C. R18-16-404(C)(1)(m)	Provided as needed	~		
	Provide notice to the public of a request for ADEQ to determine whether each of the Remedial Objectives for a site have been satisfied and will continue to be satisfied. The notice will provide the opportunity for a 30-day public comment period on the request.	A.A.C. R18-16-301(C) A.A.C. R18-16-404(C)(1)(n) A.A.C. R18-16-4-16(B)				
Operation & Maintenance	Publish a public notice announcing the availability of the Operation & Maintenance Plan for review and a 30-day public comment period. Mail the same notice to interested parties.	A.A.C. R18-16-301(C) A.A.C. R18-16-404(C)(1)(g) A.A.C. R18-16-411(E)				
Removal from WQARF Registry	Although not mandated by Arizona Statute or administrative code, ADEQ may publish a public notice upon the removal of the site from the WQARF Registry.	Not Applicable				
Any Phase	Publish a public notice announcing a request to ADEQ for a prospective purchaser agreement with a 30-day public comment period.	A.R.S. § 49-289.03(A)(3) A.A.C. R18-16-301(C)				
	Publish a public notice announcing the intention of ADEQ to enter into a settlement agreement with a responsible party, and will have a 30-day public comment period.	A.R.S. § 49-289.03(A)(4) A.A.C. R18-16-301(C)				

#### **Community Involvement Techniques**

This section describes the specific activities and resources that ADEQ uses to communicate and engage with stakeholders and community members near the Cooper Road and Commerce Avenue WQARF site.

ADEQ uses the following community involvement techniques:

- Community Advisory Board (CAB): The CAB will advise ADEQ on appropriate means of delivering site
  information as well as provide input regarding content. CAB members will also serve as an information
  resource for their community. CAB meetings are open to the public and held at easily accessible
  locations. CAB meetings may also be held virtually if requested. See Appendix E for a list of current CAB
  members.
- Local Print Media: ADEQ will publish all WQARF milestone public notices in the Arizona Business
   Gazette (static.azcentral.com/public-notices/) and the Arizona Republic East Valley
   (azcentral.com). The Arizona Newspaper Association maintains a database of all public notices
   published in major Arizona newspapers <a href="http://www.publicnoticeads.com/az/">http://www.publicnoticeads.com/az/</a>). For a list of other
   media outlets, see Appendix F.
- 2. U.S. Mail and Email Lists: ADEQ created U.S. Mail and email address lists to share updates on the Cooper Road and Commerce Avenue WQARF site. Anyone can join the site mailing list by contacting the ADEQ Community Involvement Coordinator or registering on GovDelivery (public.govdelivery.com/accounts/AZDEQ/subscriber/new).
- 3. ADEQ Website ADEQ's website provides visitors with three areas of information related to the site and is updated on an ongoing basis:
  - Notices Page: contains WQARF site public notices and announces comment periods (azdeq.gov/notices).
  - Events Page: includes information on WQARF site public meetings, including CAB meetings (www.azdeq.gov/events).
  - Site Information Page: provides detailed site information and links to the site information repository. (azdeq.gov/cooper-commerce).
- 4. ADEQ Notice Board: Notices are displayed on boards located in ADEQ's Phoenix and Tucson offices.
- Public Meetings: In addition to CAB meetings, ADEQ may schedule public meetings or open houses as needed or requested. Examples include meetings with neighborhood/homeowner's associations, schools, or other community groups.
- 6. Site Tours: The public may request site tours through the ADEQ Community Involvement Coordinator. Tours will be arranged in conjunction with the property owners and in compliance with current regulations.

ADEQ takes reasonable measures to provide access to community involvement activities to individuals with limited English proficiency and/or to those with disabilities. The community can request language interpretation, ASL interpretation, CART captioning services or disability accommodations through the ADEQ Title VI Nondiscrimination Coordinator (602-771-2228 or <a href="mailto:drago-leonard@azdeq.gov">Drago-Leonard@azdeq.gov</a>).

The following table of Communication Techniques illustrates how these techniques have and will be used throughout the WQARF process for the Cooper Road and Commerce Avenue WQARF site.

	Communication Techniques						
	Communications De	eliverable	Communications Recipients/Methods				
Туре	Why	When	CAB Interested ADEQ Website Local Print Media Members Parties List				ADEQ Notice Board
Notice	Provide notice of availability of milestone documents, request comments, and solicit input.	Per mandate (See Community Involvement Action Summary table).	<b>&gt;</b>	<b>&gt;</b>	(site and calendar pages)	(Arizona Business Gazette/Arizona Republic East Valley)	<b>*</b>
CAB or Public Meeting Notice/Agenda	Provide two-way communication about the status of site activities. The notice announces the meeting and provides the agenda.	Variable schedule based on level of site activity as scheduled by CAB and ADEQ, with the exception of the required public meeting for the solicitation of remedial objectives (see Community Involvement Action Summary table).	<b>&gt;</b>	>	(site, calendar, and CAB history pages)	Not Applicable	*
Technical Presentation	Provide current information about site activity or related topics.	At CAB meetings or at specially requested public meetings.	*	Not Applicable	(information repository or site page)	Not Applicable	Not Applicable
Technical Milestone Document	Provide current technical information about site investigation/remediation activities (e.g., Remedial Investigation, Feasibility Study, etc.)	According to the WQARF Process as documents are developed and become available.	*	Not Applicable	(online information repository)	Not Applicable	Not Applicable
Site Fact Sheet/Newslet ter	Provide current information about the site activity.	Published at the start of the Remedial Investigation and at specific milestones or other times as deemed appropriate by ADEQ and the CAB.	>	*	(online information repository)	Not Applicable	Not Applicable

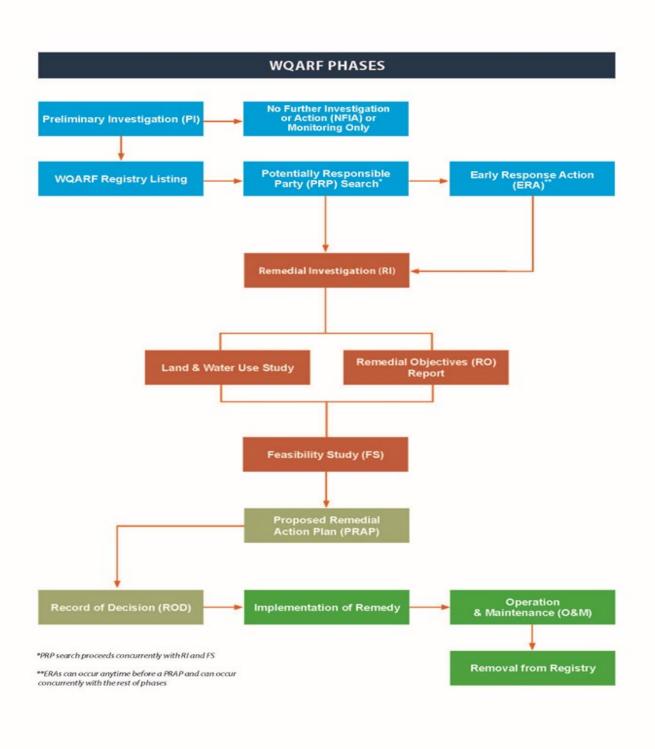
	Communication Techniques						
	Communications Deliverable			Communications Recipients/Methods			
Туре	Why	When	CAB Members				ADEQ Notice Board
Public Meeting to solicit Remedial Objectives	Provide a forum to solicit Remedial Objectives. (Note that this meeting may be conducted in conjunction with a CAB meeting.)	After the release of the Draft Remedial Investigation Report.	<b>&gt;</b>	>	(site and calendar pages)	(Arizona Business Gazette/Arizona Republic East Valley)	*
Public notice announcing a request to ADEQ for a prospective purchaser agreement	Provide notice of availability and request comments.	Per mandate (see Community Involvement Action Summary table).	~	*	(online information repository and sit p)	Newspaper of general circulation in Maricopa County	Not Applicable
Public notice announcing the intention of ADEQ to enter into a settlement agreement with a responsible party.	Provide notice of availability and request comments.	Per mandate (see Community Involvement Action Summary table).	>	*	(online information repository)	Newspaper of general circulation in Maricopa County	Not Applicable
Site Tour	Provide walking or driving tours of the site to observe current site conditions and the surrounding community and environment.	If requested, and with cooperation of current property owners.	Contact AD	EQ Communit	y Involvement Coordinator.		

### **APPENDICES**

The following appendices provide additional resources to support community involvement for the Cooper Road and Commerce Avenue WQARF site

- Appendix A: WQARF Process Flowchart
- Appendix B: History of major activities by year at the Cooper Road and Commerce Avenue WQARF site
- Appendix C: Targeted communities in the Cooper Road and Commerce Avenue WQARF site CIA
- Appendix D: Elected officials representing communities within the CIA
- Appendix E: Cooper Road and Commerce Avenue WQARF site CAB members
- Appendix F: Local media outlets in the area
- Appendix G: Related state and local agencies
- Appendix H: Current and existing prospective purchaser agreements for property in and around the Cooper Road and Commerce Avenue WQARF site
- Appendix I: Current and existing consent decree settlements related to the Cooper Road and Commerce Avenue WQARF site

# Appendix A WQARF Process Chart



## Appendix B Site History

1977

United Chemical Corporation (Unichem) purchased the site property, located at 619 West Commerce Avenue in Gilbert, Arizona, and constructed facilities for the production of copper sulfate from scrap metal. A dry well was constructed near the center of the concrete pavement that served as the foundation for the processing plant. ADEQ believes this dry well is the source of tetrachloroethene (PCE) contamination at the site. The copper sulfate production process used aqueous ammonia, lix (a petroleum-based compound) blended with kerosene, and sulfuric acid to extract copper from the scrap metal. A diesel-fired boiler was used to heat the process stream before the crystallization of the copper sulfate. PCE was reportedly used to manufacture a coolant, possibly used in the crystallization process.

1983-1984

Unichem discontinued operations at the site prior to 1983. In July 1983, Unichem sold the property to Aztec Resources, which operated a gold extraction plant at the site. The process reportedly used cyanide baths to extract gold from scrap materials and mine tailings. In September 1984, Unichem reacquired the property.

1989

The ADEQ Hazardous Waste Inspection Unit began investigating operations on the eastern portion of the site property. Several shallow soil samples were collected from the property. Samples collected from the sump of the dry well detected cyanide at levels above the residential soil remediation level (SRL) for hydrogen cyanide of 11 milligrams/kilogram (mg/kg). Arsenic, lead, and copper were also present at concentrations above their respective residential SRLs.

1990

Soil samples were collected at 12 inches below ground surface (bgs) at two locations on the western portion of the site. Arsenic, copper, and PCE were detected, but only arsenic was found at a level above its residential SRL.

A soil vapor survey found PCE in the soil vapor on the east side of the site between 4 and 5 feet bgs. Total Petroleum Hydrocarbons (TPH) were also detected in the soil samples and may have been related to the diesel-fired boiler. ADEQ has no current remediation standard for TPH in soil.

1994

Cyanide-contaminated soils found at the site in the area of the dry well were removed to a depth of 3 feet.

Three groundwater monitoring wells were installed at the site. Arsenic, chromium, and lead were detected at levels above residential SRLs. However, the soil samples did not contain any detections above minimum groundwater protection levels (GPLs).

Groundwater samples taken at the time of well installation detected PCE above its Aquifer Water Quality Standards (AWQS) limit of 5.0 micrograms per liter ( $\mu$ g/L). Arsenic and barium were detected in the groundwater samples, but at levels below their respective AWQS limits. Cyanide, benzene, ethylbenzene, toluene, xylene and TPH were analyzed for but not detected in the groundwater samples.

An exploratory boring was drilled to 99 feet bgs within the on-site dry well. During drilling, soil samples were collected every 5 to 10 feet. Arsenic, chromium, TPH, and mercury were detected above their respective residential SRLs. PCE was detected at a level above its residential SRL of 53 mg/kg and minimum GPL of 1.3 mg/kg, with PCE concentrations ranging from 800 to 24,000 mg/kg at depths from 40 to 70 feet bgs. The highest concentration of PCE (24,000 mg/kg) was detected in the soil sample collected at 70 feet bgs.

1996	Groundwater monitoring at the site continued. PCE was detected at a concentration as high as 6,600
	μg/L in a monitoring well located north of the drywell.

2001

- PCE and TCE were detected at concentrations above the AWQS limit of 5  $\mu$ g/L in groundwater samples collected from a Town of Gilbert monitoring well.
- ADEQ sampled a monitoring well west of the dry well and a monitoring well south of the dry well. The concentrations of PCE in groundwater samples from the two monitoring wells exceeded the AWQS limit.
- ADEQ installed two additional monitoring wells east of Cooper Road and approximately 1,900 feet northwest of the site.
- ADEQ conducted a Preliminary Investigation and placed the site on the WQARF Registry in June with a score of 33 out of a possible 120.
- ADEQ conducted quarterly groundwater monitoring at the site. In general, concentrations of PCE in the groundwater were lower than concentrations detected previously. No trichloroethene (TCE) was detected above AWQS limits.
- ADEQ completed an Early Response Action (ERA) evaluation at the site. During this ERA evaluation, ADEQ investigated the extent of PCE contamination in soil, soil gas, and groundwater at the site. ADEQ installed a groundwater extraction well, several soil vapor monitoring wells, soil vapor extraction (SVE) wells, and groundwater air sparge (AS) wells.

2007

In May, ADEQ installed three off-site groundwater monitoring wells to help determine the extent of the contaminant plume. In August, ADEQ conducted an SVE pilot test to determine unsaturated zone properties.

2008

In February, ADEQ installed three more monitoring wells. Concentrations of PCE in these wells indicated that the groundwater contaminant plume extended north of Guadalupe Road. The initial startup of the SVE system occurred in December.

ADEQ also worked on finalizing the construction design for the conveyance of treated groundwater to the Salt

the east of the site.



**Installation of Monitoring Well** 

2009

On May 6, the AS system began operating. The Town of Gilbert approved ADEQ's plan to discharge treated groundwater to the town's wastewater treatment plant located immediately east of the site. SRP and ADEQ finalized an agreement for the construction of the treatment plant in the SRP right-of-way and for discharge to the canal south of the site.

River Project (SRP) lateral canal south of the site and the Town of Gilbert wastewater treatment plant to

2010

In July, ADEQ completed construction of the piping from the pump and treat system plant to the Town of Gilbert sanitary sewer system and to the SRP canal. Continuous operations beginning in August. Groundwater monitoring of wells near the extraction well was conducted to determine the effectiveness of the pump and treat system.

In November, ADEQ installed an additional SVE well where previous sampling indicated that a surface spill of PCE had probably occurred.

2011

ADEQ continued to operate and maintain the SVE/AS and groundwater pump-and-treat systems. ADEQ's contractor completed an evaluation of the capture zone for the extraction well installed in 2006. The evaluation indicated a capture zone of approximately 300 feet, which included the source area of contamination.

2012

In June, ADEQ drilled and sampled three soil borings in the immediate vicinity of the main source area, the former drywell. The sample results indicated significant amounts of PCE were still present in the soils near the drywell. ADEQ installed two SVE wells in two of the borings.

ADEQ continued to operate and maintain the SVE/AS and groundwater pump-and-treat systems.

ADEQ continued to conduct groundwater monitoring of wells near the extraction well on a quarterly basis to monitor the effectiveness of the pump and treat system. In addition, the entire monitoring well network was sampled twice to monitor the extent of the plume.

ADEQ installed five additional shallow monitoring wells near the center of and in the southwest area of the groundwater plume. ADEQ also installed an additional deep monitoring well near the SRP canal and Cooper Road.

ADEQ continued to monitor wells near the extraction well on a quarterly basis to determine the effectiveness of the pump and treat system. In addition, the entire monitoring well network at the site was sampled twice in 2013 to track the extent of the plume. ADEQ continued to operate and maintain the SVE/AS and groundwater pump-and-treat systems.

- ADEQ continued to monitor wells near the extraction well on a quarterly basis to monitor the effectiveness of the pump and treat system. In addition, the entire monitoring well network at the site was sampled twice in 2014 to track the extent of the plume. The groundwater pump-and-treat system was shut down in September to evaluate the need for continued operation.
- 2015 Quarterly groundwater monitoring continued at the site and ADEQ finalized the Remedial Investigation (RI) Report in July.
- ADEQ conducted regulator groundwater monitoring at the site and installed two additional groundwater monitoring wells to better define the lateral and vertical extent of contamination. Two soil borings were installed at the source area to assess volatile organic compound (VOC) concentrations in soil and soil vapor. Additionally, ADEQ conducted groundwater modeling to examine the effect of natural attenuation at the site.
- ADEQ began drafting a site Feasibility Study (FS) Report and conducted regular groundwater monitoring at the site.
- The FS was completed in April 2018. In addition, ADEQ installed new monitoring wells, conducted regular groundwater monitoring and continued operation of the SVE system.
- The Proposed Remedial Action Plan was completed in July.
- The Record of Decision was published in June 2020. The selected remedy for the Cooper Road and Commerce Avenue WQARF site is SVE to clean-up the impacted soil/soil vapor within the source area at the former Unichem facility, and monitored natural attenuation to verify the natural degradation of the COCs in the groundwater at the Site.

# Appendix C Targeted Communities

#### **Neighborhood Associations**

The following list presents the neighborhood associations and their respective points of contact in the Cooper Road and Commerce Avenue Water Quality Assurance Revolving Fund (WQARF) site community involvement area:

**Cayman Square** 480-820-3451

Kinney Management Services <u>caymansquarehoa.com/</u>

Crystal Point Estates 480-820-1519

Heywood Realty <u>crystalpointestateshoa.com/</u>

Park Place Village 602-906-4908

parkplacehoa.org

Playa del Rey Estates 480-682-3209

Pride Community Management <u>playadelrey.nabrnetwork.com</u>

Silverhawk Neighborhood Association 480-759-4945

Vision Community Management visioncommunitymanagement.com/

Sonesta Estates 623-977-3860

Colby Management Inc. jverpoten@colbymgmt.com

Summer Meadows 480-704-2900

Premier Community Management summermeadowshoa.com/summermeadows/home.asp

#### <u>Schools</u>

The Cooper Road and Commerce Avenue WQARF site community involvement area includes the Gilbert Public School District. The following list presents the community schools in the Cooper Road and Commerce Avenue WQARF site community involvement area:

**Gilbert Public School District** 480-497-3300 140 South Gilbert Road, Gilbert, AZ 85296 gilbertschools.net/

Playa Del Rey Elementary School 480-892-7810

550 North Horne Street, Gilbert, AZ 85233 gilbertschools.net/playadelrey

#### **Vulnerable Population Centers**

ADEQ considers day cares, senior living homes, and some medical facilities as vulnerable population centers due to the age of clients served. Children under age five and adults above age 65 are considered more vulnerable to the potential health effects associated with exposure to environmental contamination.

Above Care Assisted Living Home 680 West Harvard Avenue, Gilbert, AZ 85233	480-558-7778
Brookdale North Gilbert 845 North El Dorado Drive, Gilbert, AZ 85233	840-715-7072
Heritage Manor Assisted Living LLC 1271 North Kingston Street, Gilbert, AZ 85233	480-907-7735
Smaller Scholars Montessori Academy 1675 West Guadalupe Road, Gilbert, AZ 85233	480-210-9504

# Appendix D <u>Elected Officials</u>

As of the publication of this community involvement plan, the community involvement area for the Cooper Road and Commerce Avenue WQARF site falls under Maricopa County Supervisorial District 2 and Arizona Legislature Districts 12 and 17. The Town of Gilbert does not have specified council districts.

GILBERT TOWN Officials	Gilbert Town Hall	Mayor-Town of Gilbert	Vice Mayor-Town of Gilbert
	50 E. Civic Center Dr.	Brigette Peterson	Aimee Yentes
	Gilbert, Arizona 85296		
	480-503-6871	480-503-6764	480-503-6764
		Brigette.Peterson@gilbertaz.gov	Aimee.Yentes@gilbertaz.gov
	Council Members-Town of	Laurin H	lendrix
	Gilbert	<u>Laurin.Hendrix</u>	
	480-503-6764	Scott Ar	
		Scott.Anderson	
		Yung Ko	
		Yung.Koprowski	
		Scott Sep	
		Scott.September	
		Kathy	
		Kathy.Tilque@	<u>Pgilbertaz.gov</u>
MARICOPA COUNTY	Maricopa County	County Supervisor	
Supervisors	301 W. Jefferson St. 10 <sup>th</sup> Floor	District 2	
	Phoenix, AZ 85003	Thomas Galvin	
	602-506-3416	602-506-7431 thomas.galvin@mar	icona gov
ARIZONA LEGISLATURE	Arizona House of	Representative	Representative
ARIZONA LEGISLATORE	Representatives	District 12	District 12
	Arizona State Senate	Travis Grantham	Jake Hoffman
	Capitol Complex	602-926-4868	602-926-3292
	1700 W. Washington St.	tgrantham@azleg.gov	jake.hoffman@azleg.gov
	Phoenix, AZ 85007		
	602-926-4221		
		Representative	Representative
		District 17	District 17
		Jennifer Pawlik	Jeff Weninger
		602-926-3193	602-926-3092
		jpawlik@azleg.gov	jweninger@azleg.gov
		The same arichibos	interminaci es deregigov
		Senator	Senator
		District 12	District 17
		Warren Peterson	J.D. Mesnard
		602-926-4136	602-926-4481
		wpeterson@azleg.gov	
			jmesnard@azleg.gov

# Appendix E <u>Community Advisory Board</u>

The following table presents a list of the Cooper Road and Commerce Avenue Water Quality Assurance Revolving Fund (WQARF) site Community Advisory Board (CAB) members as of March 2022.

	Cooper Road and Commerce Avenue WQARF Site			
	CAB Co-0	Chairs		
Mic	Michael Evans Pacer Udall			
<u>maska</u>	tce@cox.net	pudall@bo	othudall.com	
	CAB Mer	mbers		
Bruce Friedrich Carrie Lewis Anne Landers Eric Braun				
bfriedrich5798@gmail.com	carriejeanlewis2@yahoo.com	anne.w.landers@gmail.com	Eric.Braun@gilbertaz.gov	

# Appendix F Media Outlets

The community may use any media outlets to share information on the Cooper Road and Commerce Avenue WQARF site. ADEQ will publish all site-related public notices in the *Arizona Business Gazette and The Arizona Republic East Valley*. All future public notices for the Cooper Road and Commerce Avenue WQARF site can be found by searching <a href="https://www.publicnoticeads.com/az/">www.publicnoticeads.com/az/</a>.

#### **Newspapers and Magazines**

For a current list of Phoenix area newspapers and magazines, visit abyznewslinks.com/uniteaz.htm.

The Arizona Business Gazette 602-444-8000

azcentral.com

The Arizona Republic 602-444-8000

azcentral.com

East Valley Tribune 602-898-6500

eastvalleytribune.com

La Voz 602-444-3806

azcentral.com

#### Radio

The following stations focus on local and national news. For a current list of all Phoenix area radio stations, visit <u>radio-locator.com</u>.

KTAR, KTAR-FM 602-274-6200

ktar.com

Audacy, Inc. audacy.com

(KMLE, KOOL-FM, KZON)

iHeartMedia Inc. (602) 374-6000

(KESZ, KFYI, KGME, KNIX-FM, KMXP, KTZR, KXEW, KYOT-FM, KZZP iheartmedia.com

KBAQ kbaq.org

**KJZZ** kjzz.org

Hubbard Broadcasting 602-629-8660

(KAZG, KDKB, KDUS, KSLX-FM, KUPD) <u>hubbardbroadcasting.com</u>

Riviera Broadcasting Co. 602-648-9800

(KKFR, KMVA, KOAI) <u>desertvalleymediagroup.com/</u>

Sierra H. Broadcasting, Inc.	480-994-9100
(KAJM, KNJR)	<u>sierrah.com</u>
Univision Radio License Corporation (KHOT-FM, KOMR, KQMR)	602-243-3333 <u>univision.com</u>

#### **Television**

The following channels focus on local and national news. For a current list of Prescott area television channels, visit <a href="mailto:abyznewslinks.com/uniteazph.htm">abyznewslinks.com/uniteazph.htm</a>.

KAET (Arizona PBS)	602-496-8888 azpbs.org
KNXV (ABC15)	602-273-1500 abc15.com
KPNX (NBC Channel 12)	602-257-1212 12news.com
KSAZ (Fox 10)	602-257-1234 fox10phoenix.com
KPHO Channel 5 (CBS 5)	602-207-3333 azfamily.com
KTAZ Channel 39 (Telemundo)	602-648-3900 <u>Telemundoarizona.com</u>
KTVW Channel 33 (Univision)	602-243-3333 <u>Univision.com</u>

# Appendix G Local and State Agencies

The following list presents additional agencies that may be used by the public to address concerns related to the Cooper Road and Commerce Avenue WQARF site.

#### State of Arizona

Department of Agriculture602-542-43731688 West Adams Streetagriculture.az.gov

Phoenix, AZ 85007

Department of Health Services602-542-1025150 North 18th Avenueazdhs.gov

Phoenix, AZ 85007

Department of Water Resources 602-771-8527

Groundwater Permitting and Wells Section new.azwater.gov/permitting-wells

1110 West Washington St., Ste 310

Phoenix, AZ 85007

#### Town of Gilbert

Public Works Department480-503-6400900 East Juniper Avenuegilbertaz.gov

Gilbert, Arizona 85234

#### Other

**Agency for Toxic Substances and Disease Registry** 

Western Branch – Region 9 800-232-4636 75 Hawthorne Street, Suite 9410, M/S:HHS-1 atsdr.cdc.gov

San Francisco, CA 94105

#### **Real Estate Seller Disclosures**

Arizona Association of Realtors 602-248-7787

255 East Osborn Road #200

Phoenix, AZ 85012

<u>aaronline.com/wp-content/uploads/2017/10/Residential-Sellers-Property-Disclosure-Statement-SPDS\_REV\_010ct2017.pdf.</u>

# Appendix H <u>Prospective Purchaser Agreements</u>

No parties have requested or received prospective purchaser agreements from the Arizona Department of Environmental Quality for properties in or around the Cooper Road and Commerce Avenue WQARF site.

# Appendix I Consent Orders and Settlements

As of the date of this CIP, there are no parties that have entered into consent decree settlements with the ADEQ for properties in or around the Cooper Road and Commerce Avenue WQARF site.

## **Acronyms and Glossary of Terms**

**Aquifer:** An underground rock formation composed of such materials as sand, soil, or gravel, that can store groundwater and supply it to wells and springs. In aquifers, groundwater occurs in sufficient quantities to be used for drinking water, irrigation, and other purposes.

Aquifer Water Quality Standards (AWQS): State of Arizona maximum levels for contaminants which apply to groundwater in aquifers designated for drinking water use. For example, the AWQS for tetrachloroethene is 5 micrograms per liter (µg/L).

**Arizona Administrative Code (A.A.C.):** The publication in which the official rules of the state of Arizona are published. The *Code* is the official compilation of rules that govern state agencies, boards, and commissions.

**Arizona Department of Environmental Quality (ADEQ):** ADEQ is the executive agency of the Arizona State Government mandated to enforce and administer the State's environmental laws and regulations.

Arizona Revised Statutes (A.R.S.): State laws adopted by the Arizona State Legislature.

**Cleanup:** Actions taken that deal with a release or threat of a release of hazardous substances that could adversely affect public health and/or the environment. The word "cleanup" is sometimes used interchangeably with the terms remedial action, removal action, response action, remedy, remediation, or corrective action.

**Community Advisory Board (CAB):** A diverse group of community members interested in or affected by the presence of a WQARF site. By statute, ADEQ is required to form a CAB for each WQARF Registry site where ADEQ is initiating a Remedial Investigation. ADEQ seeks the CAB's input in the decision-making process and works with them from the onset of the RI/FS process until the requirements of the record of decision have been fulfilled.

**Community Involvement Area:** The mailing area of residences and businesses used in the notification for public meetings and other written notices regarding a site.

**Community Involvement Coordinator:** The ADEQ employee responsible for ensuring that all statutes and rules related to the involvement of the public and public outreach at WQARF sites are upheld and complied with by ADEQ. Community Involvement Coordinators manage and coordinate the work of CABs for WQARF sites.

**Community Involvement Plan (CIP):** A document that identifies techniques used by ADEQ and EPA to communicate effectively with the public during the Superfund cleanup process at a specific site. This plan describes the site history, nature and history of community involvement, and concerns expressed during community interviews. In addition, the plan outlines methodologies and timing for continued interaction between the Agencies and the public at the site.

**Contaminant:** A harmful or hazardous substance released into the environment that is not naturally occurring, or above background levels.

Contamination: Any hazardous or regulated substance released into the environment.

**Early Response Action (ERA):** Refers to a remedial action performed prior to the final remedy, and often prior to the Remedial Investigation. An ERA addresses current risks to public health, welfare, and the environment; protects or provides a supply of water; addresses sources of contamination; or controls or contains contamination where such actions are expected to reduce the scope or cost of the remedy needed at the site. Also referred to as an interim remedial action.

**Eligibility and Evaluation score (E&E):** ADEQ's method to prioritize sites for investigation and cleanup. The score is based on multiple criteria and does not always mean there is a current threat to health.

**Feasibility Study (FS):** A process to identify a reference remedy and alternative remedies that appear to be capable of achieving the Remedial Objectives for the site. It is often done as part of a two-phase investigation in conjunction with a Remedial Investigation (RI/FS).

**Groundwater:** Water beneath the earth's surface in the spaces between soil particles and rock surfaces. In aquifers, groundwater occurs in sufficient quantities to be used for drinking water, irrigation, and other purposes.

**Hazardous Substance:** Any material that, because of its quantity, concentration, physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment.

**Heavy metals:** Refers to a group of metals including arsenic, chromium, copper, lead, mercury, silver and zinc. Heavy metals often are present at industrial sites where operations have included battery recycling and metal plating.

**Information Repository:** A collection of documents about a specific project. Information on certain WQARF and Superfund sites may be available at ADEQ offices and libraries throughout the state.

**Monitoring Well (Monitor Well):** A well installed for the purpose of collecting samples such as groundwater and soil gas. Analytical results from samples are used to characterize the extent of contamination, the direction of groundwater flow, and the types and quantities of contaminants present in the groundwater.

**Plume:** A well-defined area of contamination in groundwater, soil or the air, often used to describe the dispersion of contamination in soil and/or groundwater.

**Potentially Responsible Party (PRP):** A party (individual or corporation) identified by state or federal authorities as potentially liable for cleanup costs at a contaminated site.

**Preliminary Investigation (PI):** The process of collecting and reviewing available information about a known or suspected hazardous waste site or release.

Proposed Remedial Action Plan (PRAP): A document that reviews the cleanup alternatives presented in the site Feasibility Study and identifies ADEQ's preferred alternative. Selection of a preferred alternative is not a closed-end commitment to use that alternative; rather, it is a way for the agency to indicate, based on experience and expertise, which alternative is the most likely course of action. ADEQ must actively solicit public review of and comment on all the alternatives under consideration.

**Public Comment Period:** A period during which the public can formally review and comment on various documents and ADEQ actions.

**Record of Decision (ROD):** A legal document that announces and explains the cleanup methods ADEQ will use at a Superfund/WQARF site. The Record of Decision is based on information and technical analysis generated during the Remedial Investigation and Feasibility Study, and on consideration of comments received during the public comment record for the Proposed Remedial Action Plan.

**Remedial Action (RA):** Any action taken to investigate, monitor, assess and evaluate the release or threat of release of hazardous substances or contaminants to the environment. It may also refer to the actual "cleanup" of the environment by various removal, treatment, monitored remediation, or corrective actions. The term cleanup is sometimes used interchangeably with the terms remedial action, removal action, response action, remedy, remediation, or corrective action.

**Remedial Investigation (RI):** An in-depth study designed to gather the data necessary to determine the nature and extent of contamination at a site and the risk posed by the contamination.

**Remedial Objective (RO):** Established remedial goals for the current and reasonably foreseeable uses of lands and waters of the state that have been or are threatened to be affected by a release of hazardous substance.

Remediation: Cleanup or other methods used to remove or contain a toxic spill or hazardous materials.

**Remedy:** Cleanup method chosen for a site.

**Responsible Party:** An individual or company (*e.g.*, an owner, operator, transporter, or generator of hazardous waste) that is responsible for the contamination problems at a Superfund/WQARF site. Whenever possible, responsible parties are required to clean up hazardous waste sites they have contaminated.

**Responsiveness Summary:** A summary of oral and written comments (and ADEQ responses to those comments) received during the public comment period.

**Soil Remediation Level (SRL):** A pre-determined risk-based standard protective for residential or non-residential use based upon the total contaminant concentration in soil.

Superfund: The federal program operated under the legislative authority of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the Superfund Amendments and Reauthorization Act (SARA) that funds and carries out U.S. Environmental Protection Agency solid waste emergency and long-term removal and remedial activities. These activities include establishing the National Priorities List, investigating sites for inclusion on the list, determining their priority, and conducting and/or supervising cleanup and other remedial actions. It provides for the cleanup of hazardous substances released into the environment, regardless of fault. The term Superfund also is used to refer to cleanup programs designed and conducted under CERCLA and its subsequent amendments.

**Tetrachloroethene or Tetrachloroethylene or Perchloroethene (PCE):** A clear, colorless, liquid with a chloroform or sweet odor and a low boiling point; a solvent used for dry-cleaning; degreasing and drying metals and other solids; dissolving waxes, greases, oils, fats, and gums, and in other industrial applications. PCE is a potential occupational carcinogen. Evaporation of PCE increases as temperature increases.

**Trichloroethene or Trichloroethylene (TCE):** A colorless liquid used as a solvent, metal degreasing agent, and in other industrial applications.

**Vadose Zone:** The area between the ground surface and the groundwater.

**Vapor Intrusion:** The migration of volatile chemicals from the subsurface into overlying buildings. Volatile chemicals in buried wastes and/or contaminated groundwater can emit vapors that may migrate through subsurface solid and into air spaces of overlying buildings.

**Volatile Organic Compounds (VOC):** A large group of carbon-containing compounds that are easily dissolved into water, soil, or the atmosphere and evaporate readily at room temperature. Examples of VOCs include PCE and TCE. These contaminants are typically generated from metal degreasing, printed circuit board cleaning, gasoline, and wood preserving processes.

Water Quality Assurance Revolving Fund (WQARF): Also known as the State Superfund, WQARF is the program and funding used to address hazardous substance releases within the state that are not covered by other specific programs.